



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,401	01/30/2006	Ilkka Naatti	TAMPPAT-17	1100
36528 7590 07/16/2008				
STIENNON & STIENNON				
612 W. MAIN ST., SUITE 201				
P.O. BOX 1667				
MADISON, WI 53701-1667				
EXAMINER				
CAMPOS, JR, JUAN J				
ART UNIT		PAPER NUMBER		
3654				
MAIL DATE		DELIVERY MODE		
07/16/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,401

Applicant(s)

NAATTI ET AL.

Examiner

Juan J. Campos

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. Claim 50 and 51 are objected to because of the following informalities: claim 50 is dependent on itself, see claim 50 (and claim 51 is dependent on claim 50). Appropriate correction is required. For this action, Claim 50 will be considered dependent on claim 49.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "vertical and machine direction mounting", as disclosed in claim 46 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

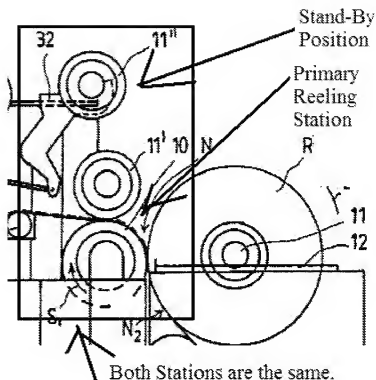
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 34, 37-38, 42, 44-45, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinnunen et al. (US Patent 5,531,396).**
5. **Regarding claim 34,** Kinnunen et al. discloses a method and device for reeling a paper or board web in a drum reel-up a paper web (W) that comprise the steps of bringing the paper web in an incoming direction to a reel spool (11) to form a machine reel in a preliminary reeling station (the area near 10 in figure 1, see figure below), the machine reel having a periphery and a periphery direction defined as extending along the periphery of the machine reel (middle of spool 11, no number), passing the web through the nip (see figure 1) formed an endless loop (belt, F) and the machine reel (middle of spool 11, no number), where the endless loop is supported between a first guide roll (21) and a second guide roll (22) mounted inside the endless loop, where the

first guide roll (21) positioned spaced against the incoming direction from the second guide roll (22), and where the paper web (W) first contacts the reel spool (11) or machine reel (middle of spool 11, no number), while engaged with the endless loop (of the support member, F); as the machine reel increases in diameter while still in the preliminary reeling station (the area near 10 in figure 1, see figure below), moving an central axis (no shown) defined by the first guide roll (21) in the peripheral direction (see figures 1-5) and against the incoming direction (the device of Kinnunen et al. does this movement when 1st guide roll 21 returns from its position in figure 5 to its position in figure 1); and transferring the machine reel away from the preliminary reeling station in the incoming direction i.e., a machine direction, in a transfer device (12, the guide rails) mounted for motion in the incoming direction so that the machine reel continues to form the nip through which the paper web passes until reeling of the machine reel is finished, see figures 1-5.



6. **Regarding claim 37 and 38**, the method comprising of reeling the paper web is discussed above in claim 34, Kinnunen et al. also shows the methods where the reeling spool is in a stationary position during the reeling in the preliminary reeling station (see figure above). Kinnunen et al. also shows the step where the new reeling spool (11) is brought to the preliminary reeling station and against the loop of the supporting member (F) with a substantially vertical linear movement (see figure above), see figures 1-5.
7. **Regarding claim 42**, the method comprising of reeling the paper web is discussed above in claim 34, Kinnunen et al. also shows the method where the first guide roll is transferred with respect to the loop of the support member (F).
8. **Regarding claim 44**, Kinnunen et al. discloses a method and device for reeling a paper or board web in a drum reel-up a paper web (W) that comprises a reel spool (11)

having a spool axis (no number), and an outer periphery for receiving a paper web and on which is forming a paper reel, a primary reeling device (considered reeling cylinder 10) arranged to receive the reel spool (11), where the web extends in an incoming direction to the paper reel, a supporting member (F) having an endless loop and inside the endless loop at least a first guide roll (21) and a second guide roll (22), the endless loop having an upper web-carrying portion (see figures 1-5) arranged to be driven in a machine direction, and where the upper web-carrying portion forms a nip with the paper reel (see figures 1-5) forming on the reel spool (11), the nip positioned where the web first joins the paper reel (see figures 1-5), where the first guide roll (21) is mounted for motion from a first position (see figure 5) in nipping engagement with the paper reel to a second position (figure 1) against the incoming direction of the web such that a portion of the upper web-carrying portion of the endless loop (of the support member F) wraps around the an outer periphery of the paper reel, and a transfer device (12) mounted for motion in the machine direction, and arranged to receive the reel spool (11) from the primary reeling device (10) and move the reel spool (11) in the machine direction so that the outer periphery of the paper reel remains in engagement with the endless loop upper web-carrying portion during reeling of the paper web on to the reel spool.

9. **Regarding claim 45**, the device comprising of reeling the paper web is discussed above in claim 44, Kinnunen et al. also shows the first guide roll (21) has an axis (not shown) movable (it is movable with the guide roll) linearly (see figures 1-5) at least in the machine direction.

10. **Regarding claim 47**, the device comprising of reeling the paper web is discussed above in claim 44, Kinnunen et al. also shows linear rails (12) extending in the machine direction (see figures 1-5) and the transfer device (12, since the rails are the transfer device) is mounted for motion in the machine direction on the linear rails.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 35-36 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (US Patent 5,531,396) in view of Saukkonen (US Patent 4,842,209).**

13. **Regarding claim 35**, the method comprising of reeling the paper web is discussed above in claim 34, Kinnunen et al. does not disclose the method of moving the first guide roll as discussed in claim 35. Saukkonen discloses a method and device in the winding of a web. In addition, Saukkonen discloses a first roll 18 (or first guide roll), and a second roll 19 (or second guide roll), see figures 1-2. Additionally, Saukkonen discloses lever arms 21 and 22, and fastening pieces 24 and 25 (see column 4, lines 40-52 and figures 1-2). Together all these parts will be considered the body connecting rolls 18 and 19.

At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the two rolls 18 and 19 (for the first guide roll given by Kinnunen et al.), lever arms 21 and 22, and fastening pieces 24 and 25 (21-22 and 24-25 forming the connecting body) to the device disclosed by Kinnunen et al. so that the step of moving the first guide roll (now 18) in the peripheral direction and against the incoming direction is preformed in such a manner that the first guide roll (18) moves from a first position (figure 5) where the first guide roll initially engages the support member (F) against the machine reel at the nip, to a position further away from the machine reel (figure 1), so that the machine reel is first formed with a hard nip, and after movement of the first guide roll the machine roll (18) is formed with a nip which is softer than the hard nip while still in the preliminary reeling station. The motivation for the combination would be to vary the nip force on the spool during winding of the reeling of the paper web (W).

14. **Regarding claim 36**, the method comprising of reeling the paper web is discussed above in claims 34 and 35, Kinnunen et al. does not disclose the method of as discussed in claim 36. Saukkonen discloses a method and device in the winding of a web as discussed above regarding claim 35. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to align the first guide roll axis (for the guide roll given by Saukkonen) with the reeling axis (of the spool 11) so that the two axis define a plane that is vertical when the first guide roll (18) engages the support member (F) against the machine reel at the nip. The motivation for the combination would be to place the nip at the lowest point of the spool (7).

15. **Regarding claim 39**, the method comprising of reeling the paper web is discussed above in claim 34, Kinnunen et al. does not disclose the method of as discussed in claim 36. Saukkonen discloses a method and device in the winding of a web as discussed above regarding claim 35. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the two rolls 18 and 19 (for the first guide roll given by Kinnunen et al.), lever arms 21 and 22, and fastening pieces 24 and 25 (21-22 and 24-25 forming the connecting body) to the device disclosed by Kinnunen et al. so that the method where the first guide roll (18) and the second guide roll (19) are both moved against the incoming direction, in such a manner that the position of the endless loop of the supporting member (F) also moves against the incoming direction. The motivation for the combination would be to so that the first and second guide rolls can be adjusted for the reeling a new spool.

16. **Regarding claim 40**, the method comprising of reeling the paper web is discussed above in claims 34 and 39, Kinnunen et al. does not disclose the method of as discussed in claim 40. Saukkonen discloses a method and device in the winding of a web as discussed above regarding claim 35. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the two rolls 18 and 19 (for the first guide roll given by Kinnunen et al.), lever arms 21 and 22, and fastening pieces 24 and 25 (21-22 and 24-25 forming the connecting body) to the device disclosed by Kinnunen et al. so that the first and second guide rolls (18 and 19) are interconnected with a rigid connecting body and so move together. The motivation for

the combination would be to keep the rolls 18 and 19 the same distance apart during reeling of a new spool.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (US Patent 5,531,396) in view of Kojo et al. (US Patent 7,017,855 B2).**

19. **Regarding claim 41**, the method comprising of reeling the paper web is discussed above in claim 34. Kinnunen et al. does not disclose the method of where the first and second guide rolls are moved independently. Kojo discloses a pressing device 5 that can move independently (see figure 7 and column 5 lines 7-18). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the pressing roll 5 for the first and second guide rolls (21, 22 see regarding claim 34) so that the can move independently. The motivation for the combination would be to have either of the rolls able to adjust the tension in the belt.

20. **Regarding claim 46**, the device comprising of reeling the paper web is discussed above in claim 44. Kinnunen et al. does not disclose the where the axis of

the first guide roll is mounted for linear movement in the machine direction and is mounted for linear movement in a vertical direction independent of the mounting for movement in the machine direction. Kojo discloses a pressing device 5 that can move independently (see figure 7 and column 5 lines 7-18). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the pressing roll 5 for the first and second guide rolls (21, 22 see regarding claim 34) so that the device of Kinnunen et al. would have a mounting for both vertical and machine direction movement, independent of each other. The motivation for the combination would be to position of the guide rolls and adjust the tension in the support member (F).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claims 43 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (US Patent 5,531,396) in view of Möller et al. (US Patent 6,311,921 B1).**

23. **Regarding claims 43 and 49-51**, the method and device comprising of reeling the paper web is discussed above in claims 34 and 44. Kinnunen et al. does not disclose the method and reel-up as discussed in claims 43 (for method) and 49-51 (for device). Möller discloses a winding device and method) a carrying drum (12, or first

Art Unit: 3654

guide roll), discharge roll (42) and third guide roll (76) inside a perforated belt (see figure 2, column 10 lines 62-67 and column 13 lines 1-12). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the third guide roll (76) in the position, as shown in Möller, and adjust the first guide roll (21) and second guide roll (22) to the respective positions (shown in Möller) so that the third guide roll is mounted inside the endless loop in a direction against the incoming direction, and where the endless loop contacts the reel spool or machine reel between the first guide roll and the second guide roll. Also, the substitution would allow the third roll to be located as discussed in claim 49. In addition, the second guide roll would be stationary and the third guide roll (76) would be adjustable to adjust the tension of the support member (F). The motivation for the combination would be to provide an extra guide roll for the web before the web is reeled to the spool (11) and first guide roll (21).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. **Claim 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnunen et al. (US Patent 5,531,396) in view of Junk (US Patent 5,577,685).**

26. **Regarding claim 48**, the device comprising of reeling the paper web is discussed above in claim 44. Kinnunen et al. does not disclose linear rails extending in

the vertical direction where the primary reeling device is arranged movable in the vertical direction on the linear guide rails. Junk discloses a contact pressure roll 15 disposed on a roller-bearing slide 18 which can be moved along a vertical guide track 19 (or linear rails), see column 3, lines 19-21. Also, Junk discloses that the pressure roll 15 forms an inlet gap 16 with respect to the primary reel 6. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to connect the guide track to the reeling cylinder (10) and reel-up device (disclosed by Kinnunen et al.) so that the reeling cylinder is movable substantially in the vertical direction on the frame (of the device disclosed by Kinnunen et al.) of the reel-up device by means of guides (or linear guides. The motivation for the combination would be to move the primary reeling device (10) in the vertical direction.

Response to Arguments

27. Applicant's arguments filed June 11, 2008 have been fully considered but they are not persuasive.

Regarding applicant's arguments, see starting with "The invention set forth" on the end of page 12, examiner does not agree with argument because "10" in Kinnunen et al. is considered the "10" the primary reeling device (see regarding claim 44 above) and "21" is considered (by the examiner) a first guide roll (see regarding claim 44 above and/or page 5 line 12 of the first office action).

Regarding applicant's arguments, see starting with "The invention set forth on new claim 34" page 13, examiner does not agree with argument because the

Saukkonen reference is used to show two guide rolls (18 and 19) that move together and are connected to in a rigid body. It is not used as discussed in arguments (see use of Saukkonen above and in previous office action).

28. Applicant's arguments with respect to White, Verajankorva and Aalto (page 13) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan J. Campos whose telephone number is (571) 270-5229. The examiner can normally be reached on 9am-4pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJC
/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3654